RESEARCH PAPER

Rural Governance, Forestry, and the Promotion of Local Knowledge: The Case of the German Rural **Development Program 'Active Regions'**

Lukas Giessen · Michael Böcher

Accepted: 5 March 2009/Published online: 24 March 2009

© Steve Harrison, John Herbohn 2009

Abstract This article investigates the role of local knowledge in the policy approach of neo-endogenous rural development, which may be held by local and regional actors such as municipal and county level politicians, local and regional level administration, entrepreneurs as well as local third sector representatives. The main question addressed is whether local knowledge under this approach is merely mobilised or if rural development processes are even based on such knowledge, placing it at the centre of such policy. The relevance of this approach to forestry is also explored. The types of forest owners for which the neo-endogenous rural development approach is appropriate and the types that may have difficulties in coping with this cross-sectoral and area-based approach are especially examined. Using a case study design on the German Active Regions funding program it is shown that the neo-endogenous approach is most relevant to large private forest owners and small-scale corporate enterprises, but also has potential for small- and medium-sized private owners. Concerning the role of knowledge held by local and regional actors, the approach is shown to largely build on the use of local expertise, and hence policy acceptance increases. However, scientific knowledge as well as politics are found to play a major role in the use, production and interpretation of local knowledge.

Keywords Integrated rural development · Small-scale forestry · Forest owners · Knowledge transfer · Knowledge production · Scientific knowledge

Chair of Forest and Nature Conservation Policy, University of Göttingen/Germany, Buesgenweg 3, 37077 Goettingen, Germany

e-mail: lgiesse@uni-goettingen.de

M. Böcher

e-mail: mboeche@uni-goettingen.de



L. Giessen (⋈) · M. Böcher

Introduction

Traditional policy approaches to rural development have been based predominantly on *rural government*, mainly coordinating agricultural concerns and interests. In contrast, the term *rural governance* implies a multi-dimensional steering and managing of various demands currently being made upon rural space (Marsden and Murdoch 1998; Goodwin 1998). In Germany this discourse is reflected by the term *regional governance* (Böcher 2008a; Giessen 2008). This new paradigm of rural governance has been conceptualised as *neo-endogenous rural development* (Ray 2006, who introduces NERD as acronym for the approach).

Rural Governance and Local Knowledge

This new approach to rural development is characterised by a shift in focus from a centralised and sectoral approach of interventions towards more participatory, negotiated and cross-sectoral approaches, activating local endogenous potentials of key rural stakeholders. Potential local and regional stakeholders include forest owners, farmers, nature conservationists and entrepreneurs. The approach is supposed to mobilise endogenous potentials of 'autonomous self-governing networks' (Goodwin 1998, p. 8) and in doing so actively involves the knowledge of rural actors about immediate living circumstances (Böcher 2008a). Ray (2006, p. 278) in this context developed the neo-endogenous rural development approach which assumes that 'socio-economic well-being can best be brought about by restructuring public interventions away from individual sectors in favour of a mosaic of local/regional territories'. Central to the approach is that along a bottomup trajectory a 'local area must acquire the capacity to assume some responsibility for bringing about its own socio-economic development'. A key feature is the partnerships among a range of local public and private actors, potentially including communal and county politicians and administrational representatives, locallybased businessmen as well as local-level NGOs. Such local partnerships are supposed to pool the knowledge held by these local actors as one of the most crucial factors determining the success of a partnership approach (OECD 2001, 2006; Moseley 2003). However, besides the high relevance of local knowledge within neo-endogenous rural development (NERD), Ray (2006) also emphasises the role of 'the extralocal'. In the context of rural development efforts, this may be for example external technical or political advisers, actors from other localities with relevant knowledge which has been accumulated at local level, and institutions such as supranational, national or sub-national (government) agencies. Here lies the major

¹ Ray uses the terms 'local' as well as 'regional' almost synonymously. He refers to formal as well as informal levels of political coordination at which the policy approach applies and which are neither purely local (in terms of communal) nor sub-national (in terms of federal states). In this paper the two terms are used in the same quasi-synonymous way, even though the literature on *local* knowledge obviously refers to local while rural governance and neo-endogenous development scholars often cite the term 'regional', especially in a German context. The latter term in its empirical occurrence usually consists of one up to several counties, yet smaller than a Federal State.



difference and advancement of NERD as compared to the earlier concept of 'endogenous rural development'. The latter emphasises autonomous potentials and approaches to development for individual localities (for example, see Bruckmaier 2000; van der Ploeg and Long 1994; Hahne 1985, 1986) where extra-local agents, conditions and incentives have not played a major role in explaining rural development.

An example of the increasing role of external incentives and actors can be seen in recent developments within rural studies as well as rural development policy, especially when considering the European rural development paradigm. In science this new paradigm is being discussed under the NERD approach (see Ray 2006), in concepts of rural governance (see e.g. Marsden and Murdoch 1998; Goodwin 1998; Edwards et al. 2001; Woods and Goodwin 2003) or regional governance respectively (Böcher 2008a; Böcher et al. 2008). Recent policy in many OECD countries is designed following the NERD-approach. Wider rural policy thinking reflects this discussion by applying 'The New Rural Paradigm' (OECD 2006). The OECD—especially with its related publications OECD (2001) and OECD (2006) thereby sets the stage for a 'less defensive approach to rural policy and stronger coordination across sectors, across levels of government, between public and private actors [... and] a new focus on place rather than sectors' (OECD 2006, p. 3). Since 1991, within the EU, the new European rural paradigm has been tested and continuously developed as the 'LEADER-approach' in successive programs (the community initiatives Leader, Leader II and Leader+, see EU Commission 2006 for details). As noted by EU Commission (2005) LEADER is now an integral part of the recent European Agricultural Fund for Rural Development (EAFRD 2007-2013).

In Germany, the Ministry of Consumer Protection, Food and Agriculture (hereafter BMVEL, German acronym) also contributed to this political discourse by initiating 'Active Regions' as an individual model and demonstration funding program for rural development (BMVEL 2005). Active Regions has been implemented between 2002 and 2007, in parallel with Leader+ as a central component of the German sustainability strategy. It is the second important NERD-program in Germany and can be interpreted as a national proxy to the EU's Leader+ initiative, which was launched in the context of the change-oriented 'Agrarwende'-policy of the green Minister of Agriculture in 2001 (for details see Giessen and Böcher 2008).

Relevance of Neo-endogenous Rural Development to Forestry

The role of forestry in NERD is ambiguous. At local levels forestry is perceived as a relevant partner with considerable potential for contributing to and participating in NERD efforts. A quantitative survey among local rural development experts of all 148 Leader+ regions in Germany revealed forestry's potential in different fields of action and its actual participation under the program in Germany (Fig. 1). Giessen et al. (2006), Giessen and Böcher (2008) and Ortner (2008) have reported examples of successful forestry participation at the local level under NERD funding programs. Yet forestry actors do not tap the full potential of respective funding programs, as



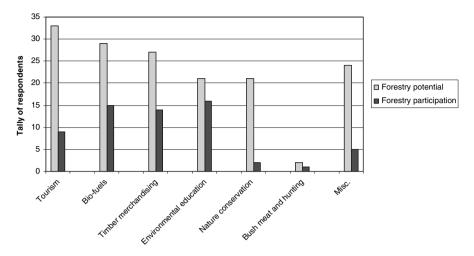


Fig. 1 Forestry potential and participation in German Leader+ projects by fields of action. *Note*: Leader+ here serves as an example of the NERD approach. *Source*: Giessen et al. (2006)

the participation of for example forest owners lags behind their potential. Significant institutional as well as programmatic reasons structurally hindering the involvement of forestry into NERD efforts were observed (Giessen 2008; Giessen and Krott 2009). The authors explain this hesitation of forest owners, their associations and public forest administrations as due to the cross-sectoral nature of NERD programs, concluding that there was no necessity for forest owners to cooperate under these funding schemes.

Research Ouestions

This article firstly analyses the role that local knowledge plays in political practice on NERD. The question here is whether local knowledge is merely mobilised in one way or another, or whether rural development programs are based on such knowledge and are capable of transferring local knowledge to other levels or places. Recent work in political science (e.g. Fischer 2000), social anthropology (Neubert and Macamo 2005) and rural studies (Ray 2006) indicates however, that a combination of local knowledge resources and extra-local scientific knowledge can provide a more fruitful approach. Secondly, whether the NERD approach is of relevance to and has positive potential for forestry in general and forest owners in particular is investigated. In more detail it is asked for which types of forest owners such programs are most relevant and which types of owners may have difficulty in coping with the cross-sectoral approach, because NERD seems to become a more and more important policy field for forestry issues (Böcher and Giessen 2006). This question is especially interesting to examine because small and medium forest owners may contribute a wealth of locally grounded social as well as physical forest-related knowledge to local development processes.



The Role of Local Knowledge in Political Problem-Solving

Scientific knowledge is viewed as being crucial to find policy solutions to current political challenges including questions relating to the environment, and the use of natural resources in particular (Böcher 2008b). Referring to the sociology of knowledge, the general role of knowledge in the policy process can be described as follows (Stehr 2007):

Knowledge serves as a model for reality.

Knowledge illuminates and comprises discovery.

Knowledge can be a first step of action for changing reality.

Hence, facing political challenges, knowledge can serve as a resource for changing the political reality by discovering and evaluating alternative solutions as reactions to these challenges and finally finding an adequate problem solution.

In traditional technocratic views, scientific expertise produces the necessary political knowledge to be applied in the political process. This view is lately being challenged by demands to integrate the knowledge of citizens and that held by collective locally-based actors adequately into political-decision making (Fischer 2000). The social studies of science even consider a new mode of knowledge production in which traditional scientific knowledge (referred to as Mode 1 knowledge) is more or less supplemented by so-called Mode 2 knowledge, which integrates the knowledge production that is carried out in the context of application as well as tacit knowledge (Gibbons et al. 1994).

Two main reasons for this debate can be identified. Firstly, current policy problem solutions (e.g. to environmental problems or sustainability issues) are increasingly complex and thus are dependent on science-laden problem solutions. Consequently, it is argued that political decisions might lack democratic legitimacy due to the rising influence of scientific 'facts', which in turn are only weakly democratically legitimised (Fischer 2000; Pregernig and Böcher 2008). The incorporation of other knowledge sources such as local knowledge could then be a strategy to secure the democratic legitimacy of political decisions, even if these decisions are more and more dependent on scientific knowledge (Fischer 2000). Secondly, many political problems can be more readily solved if local knowledge is incorporated in the process of finding adequate problem solutions. This is for at least two reasons: (1) If local citizens' knowledge is integrated in the policy process at an early stage, political decisions might be more readily accepted by local actors because they see their interests and wishes better reflected (Cash et al. 2002). Under this argument, the integration of local knowledge serves as an instrument to strengthen political legitimacy, political acceptance and the implementation of political decisions. (2) It has been asserted that policy problems which are related to specific local aspects can be solved more appropriately by incorporating the expertise of local politicians and the local administration, organised stakeholder groups and citizens concerning their immediate living conditions (Fischer 2000, 2003; Böcher 2008a). These arguments are well in line with the governance debate, according to which the central state no longer has all knowledge resources at hand



for coping with complex problems, and thus needs input from various actors (Rosenau 1998).

In the case of NERD it is argued that rural development policy, which is actually designed to suit local conditions of individual rural areas, simply depends on knowledge held by local and regional actors in the public, business as well as the non-profit sector, because rural stakeholders, citizens and polititians know best about weaknesses and strengths of 'their' locality (Böcher 2008a). As a consequence, political approaches for area-based development emphasize the role of rural citizens' knowledge as an important source for more appropriate and effective implementation of rural development policy (BMVEL 2005; OECD 2006; Ray 2006; Böcher 2008b).

Conceptualising Local Knowledge

For Antweiler (1998, p. 490) 'local knowledge consists of factual knowledge as well as skills and capabilities, most of which have some empirical grounding. Since it is locally and culturally situated and thus a 'social product', local knowledge is often barely conscious and only partly verbalized, even though it may be complex and comprehensive'. Because this definition focuses excessively on the implicit nature of local knowledge it will be supplemented with notions based on Schultze (1998) and Schröder (1995). As a kind of lowest common denominator, local knowledge then can be considered as comprising factual knowledge and practical skills, which have emerged under (local) conditions, i.e. are situated in specific ecological and socio-cultural contexts, which adapt over time. Similar conceptions have been used in connection with 'farming styles' (e.g. by van der Ploeg 1994). Farming styles refer to specific farming strategies, which are conscious responses of farmers to the prevailing ecological and socio-economic conditions (van Averbeke and Mohamed 2006). This conception of locally grounded practices of natural resource management has also been applied in the field of forestry (e.g. van der Ploeg and Wiersum 1997).

Expectations about the Role of Local and Forest-Related Knowledge

Following the theoretical reflections it is firstly assumed that NERD practice emphasises the role and significance of local knowledge and makes it an integral part of the policy approach. Secondly, and reflecting the theoretical background, it is assumed that the political practice of *neo*-endogenous development does not stress local knowledge as the sole source of knowledge mobilised for bringing about development. Rather, local knowledge is supplemented by other extra-local sources. NERD consequently involves various local actors, including forest owners, who are addressees of the rural development programs. Consequently, it thirdly is hypothesised that emphasising the role of local knowledge increases policy acceptance among policy addressees. Lastly, the low degree of actual participation of forest owners into related funding programs, despite a high perceived potential for the sector, suggests that NERD programs entail potential only for particular



types of forest owners. It is hypothesised that such cross-sectoral and locally-grounded activities are more attractive to small-scale forest enterprises than for large-scale operations, because small enterprises are more likely to engage in niche markets and their interests may be more diverse than mobilising timber as their first priority. (See Schraml and Selter 2008). In accordance with Harrison and Herbohn (2000) 'small-scale' here is understood as a contrast with large-scale or industrial forestry, which is usually owned or managed by governments or large enterprises.

Research Method

Following the empirical-analytical approach, a qualitative research method has been adopted. Using a case study approach on the German Active Regions funding program, the analysis is primarily based on two qualitative methods: (i) document analysis (as described by Jones 1996) has been employed on Active Regions policy documents, on the detailed web-based documentation of Active Regions local processes and projects, as well as on related publications by key actors of rural development policy. (ii) 28 interviews among experts in the field of area-based rural development and forestry were carried out. Most of the interviewees can be described as collective actors at an institutionalised level. Table 1 provides an overview of the population of interviewees. The interviews were of a semi-structured nature (after Jones 1996), also comprising narrative elements on individual experiences with forestry in cooperative programs.

For complementing the primary data, other empirical data and findings from the accompanying research to the Active Regions program have been consulted. Being part of the accompanying research team from 2004 allowed the authors to overview of all data produced and to select from it as appropriate. The respective results and data are documented in Böcher et al. (2008), Elbe et al. (2007) and in more detail in Elbe (2007), Lukesch et al. (2008), Benz and Meincke (2007) and Böcher and Tränkner (2007). In short, Böcher and Tränkner (2007) as well as Elbe (2007) built their inquiries on document analysis of mandatory reporting by the Active Regions model regions. Lukesch et al. (2008) relied on data derived from participant observations during focus group sessions whereas Benz and Meincke (2007) employed a combination of quantitative and qualitative network analyses.

Relevance of Active Regions to Forestry and Forest Owners

Within Active Regions several local projects have been implemented with direct or indirect relevance to and participation of forest owners, forest management associations and the forest service. Table 2 provides an overview of projects with forestry involvement under the funding scheme. Thirty-six projects, which were approved in 18 model regions up to the end of 2005, were of direct relevance to forestry (Own inquiry from Nova-Institut 2008).



Table 1 Population of the qualitative survey on the role of forestry within neo-endogenous rural development

Actor group	Organisation	Code
Associations	Working Group of German Forest Owners' Associations (AGDW)	Assoc1
	German Forestry Society (DFV)	Assoc2
	Federation for Nature Conservation (NABU)	Assoc3
	Working Group for Peasant Agriculture (AbL)	Assoc4
	German Association for Land Care (DVL)	Assoc5
	German Farmers' Association (DBV)	Assoc6
Public administration	Ministry of Economy, Traffic, Agriculture and Viniculture, Rhineland-Palatine	FedSt1
	State Forest Service, Thuringia	FedSt2
	Federal Ministry for Food, Agriculture and Consumer Protection, Department 53 (a)	FedGov1
	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	FedGov2
	Federal Ministry for Food, Agriculture and Consumer Protection, Department 53 (b)	FedGov3
	Federal Ministry for Food, Agriculture and Consumer Protection, Department 52	FedGov4
Science	University of Kassel	Sci1
	University of Göttingen	Sci2
Consultants	Nova-Institut	Cons1
	SPRINT consult	Cons2
	ÖAR consultancy	Cons3

Note: The codes given in the last column stand for the respective interviewee, indicating whether he or she represent associations (Assoc), Federal States' (FedSt) or Federal Government (FedGov), scientists (Sci) or consultants (Cons)

Despite the actual participation of forest owners in projects, a much higher potential for forestry has been perceived by interviewees. While Fig. 1 referred mainly to sector-external respondents, Table 3 provides a more distinct picture of the potential of NERD programs for forest owners as perceived by respondents within and external to the forestry sector. Hence, the type of ownership may provide further explanations for the discrepancy between low participation and high perceived potentials for forestry.

The regionalised and inter-sectoral approach employed by Active Regions has implications for the type of forest owners with their respective knowledge, who potentially could benefit from funding, and thus could contribute to the program's aim of cross-sectoral action. It is assumed that small-scale forestry enterprises are an appropriate benficiary of the approach. In a German context the term 'small-scale forestry' comprises most of the corporate forests owned by municipalities as well as small (less than 200 ha) and medium-sized private forest holdings (between 200 and 1000 ha), while excluding state-owned public forests and private large-scale operations.



Table 2 Examples of Active Regions projects with immediate relevance to forestry

Project domain	Exemplary projects
Recreation and tourism	Promotion of health-tourism in the Tharandt forest
Social integration	Creation of a Forest School with forest experience facilities
	Centre of learning for nature, environment, forests and forestry
Nature conservation	Establishing a coppice forest for biodiversity
Renewable energy and fuelwood	Local wood resources for generating power and heat for a public indoor pool
	Farmers and forest owners as biofuel producers and service providers
	Establishment of a production and marketing cooperative for fuelwood
	Feasibility study for a local fuelwood centre
	Local land register for fuelwood
Wood products and	Initiation of a cooperative on local timber production
marketing	Online market-place for local high quality timber
	Sensitising forest owners for the regional brand 'Eifel'

Source: Own inquiry from Nova-Institut (2008)

Table 3 Potential for forest owners in NERD programs in Germany

Respondent group	Conventional potential for forestry	Innovative potentials for forestry
Forestry actors (such as representatives of forest owners associations and public forest services)	Additional mobilisation of timber Financial returns from public funding	Further develop sectoral strategies for coping with cross-sectoral programs
Sector-external actors (other experts on the role of forestry in NERD)	Additional mobilisation of timber	Further develop sectoral strategies for coping with cross-sectoral programs
	Financial returns from public funding	Product innovations (e.g. for recreation or tourism markets)
	Increasing the political visibility and relevance of the sector	Innovations in political alliances Setting forestry issues onto development agenda

Since public as well as private forest owners in Germany are organised at the local level, all types could potentially participate in the program. However, closer examination reveals that state forest services, which operate on a large-scale, are inflexible administrations which are not compatible with the fundamental idea of a cross-sectoral, area-based and participative approach (Interview Assoc 1). However, the state forest service was reported having personnel resources at their disposal for participating in NERD. German *corporate forests* are mainly owned by municipalities. Given a relative high importance of social and protective goals of this owner type (Krott 2005), corporate forest owners are considered as non-industrial and hence qualify under the above small-scale forestry definition. Besides their personnel resources, municipalities were perceived to have information about cross-sectoral



funding programs including Active Regions, making them a promising target group for the NERD policy approach. For private forest owners in general, the time and labour-intense participation in collective processes and negotiations were identified as hindering their access to the program. Additionally, property rights and the freedom of action are important values among private forest owners (Krott 2005). Forest owners perceived cross-sectoral strategies, including Active Regions, as bearing the risk of underestimating this point at the cost of the owners' control over forest resources. In addition, voluntary public funding programs are perceived as a form of prelude to tightening of regulations. Collective NERD action thus presents a limitation of the freedom of action, causing rejection among a number of private owners. Closer examination of the group of private owners reveals that small and medium private owners often do not live on or near of their forest estate, making them difficult to engage in local development processes in the vicinity of the resource base. Information on integrated rural development programs such as Active Regions was perceived as being scarce among these owner types. Further, dealing with small and medium owners was reported to mean dealing with old men, who were perceived as being reluctant to join in such progressive and communicative approaches. In contrast, forest management associations of small and medium-scale owners could be a valuable target group. However, a rather standardised representation of these owners by a single consultant, who usually manages all their commercial operations, was perceived as not being innovative in a NERD context. In contrast to small private owner types, large-scale private owners, who are living close to their property, could be a promising target group, unless they assert the primacy of unfettered private ownership. Participation in local collective processes was perceived as enhancing their prestige within their communities, which as a motivation to engage, especially among aristocratic owners, was observed to be of importance, too.

Synthesising these findings leads to an overview of forest owner-type related factors, which are facilitating and inhibiting owner's active involvement into NERD programs. Table 4 summarises these findings based on the expert interviews with actors within the forest sector. Corporate small-scale forestry operations as well as large private owners seem to be the most promising target groups. However, combining the personnel resources of state forest services with the forest area held by small and medium owners could be seen as another promising approach to attracting the remaining small-scale forest owners to NERD programs. Hence, the above hypothesis, according to which NERD programs were more attractive to small-scale owners, may only partly be adopted.

A critical review of forestry participation under NERD funding programs reveals that major political factors hinder a wider engagement. Because NERD programs tend to take an agricultural focus and largely are administered by agricultural institutions, a 'level of institutional non-fit' (Giessen 2008) can be observed as compared to forestry institutions. Furthermore, NERD schemes take a cross-sectoral approach, which must be seen as competing with sectoral funding arrangements. Hence, interests of a rather sectoral clientele (such as farmers' or forest owners' associations) may be better pursued using sectoral rather than cross-sectoral programs. Consequently, integrating forestry into NERD is obstructed by an agricultural bias of the programs as well as by the reluctance of the forest sector to



Table 4 Forest owner type specific factors facilitating and inhibiting their participation in NERD programs

Forest ownership	Forest ownership Ownership specification	Facilitating factors for NERD-participation	Inhibiting factors for NERD-participation	Potential benefits from NERD
State		(+) Local representation(+) Personnel resources available	(–) Inflexible and large public administration	(-) No incentives within the administration for participation
Private	Large (>1000 ha)	(+) Local representation	(-) Reservations against public funding programs	 (+) Increase in prestige in the region (+) Maximising turnover by funds (+) Subsequent income as potential effect
Private	Medium, individual	(+/-) Local representation not definite	 (-) Preference to act in traditional ways (-) Reservations against public funding programs 	(+) Maximising turnover by public funds(+) Subsequent income as potential effect
Private	Small (<200 ha), individual	(+/-) Local representation not definite	 (-) Preference to act in traditional ways (-) Reservations against public funding programs 	 (-) Preference to act in traditional (+) Maximising turnover by public funds ways (+) Subsequent income as potential effect (-) Reservations against public funding programs
Private	Management associations	(+/-) Local, but indirect representation	 (-) Standardised representation (-) Reservations against public funding programs 	(+) Maximising turnover by public funds(+) Subsequent income as potential effect
Corporate		 (+) Local representation (+) Personnel resources available (+) Information on NERD available 		 (+) Maximising turnover by public funds (+) Subsequent income as potential effect



engage in cross-sectoral action (Giessen and Krott 2009). In addition to these major hindrances a lack of information on NERD among forest owners and administrations can be observed (Ortner 2008; Giessen 2008). Forest administrations at regional level currently are under enormous pressure as a consequence of administrative reforms and do not have the capacity to engage in participatory processes (Giessen 2008). Furthermore, rural development is mainly discussed in the agricultural policy domain at national and EU-level, at which the Common Agricultural Policy provides for a framework assuring representation of strong agricultural interests. This strong representation of agriculture is also the case at the national level in Germany, where the 'Joint Task Agricultural Structures and Coastal Protection' (GAK, German acronym) represents such a framework. Finally, the Active Regions program has been initiated and administered by the Federal Ministry of Agriculture's rural development department, without cooperation with its forestry department. Forestry, in contrast, is only weakly represented at the EU or the national level in Germany due to the lack of political responsibilities for forestry issues which lies within the Federal States.

Local Knowledge Under the Active Regions Program

Active Regions was observed to mobilise local knowledge through local institutions, which have been newly created as a consequence of the funding program and process features, which have characterised program implementation.

Regionalisation of Public Funding as Avenue for Local Expertise

Active Regions applies a new approach to rural development, which is distinct from mainstream funding programs within agricultural and regional policy (BMVEL 2004). The program builds on the principles of (i) regionalisation, (ii) partnership, (iii) integration, (iv) competition, (v) know-how and (vi) new modes of governance in rural development policy (BMVEL 2004; Elbe et al. 2007). The principle of regionalisation has far-reaching implications for the use of local knowledge, placing it at the centre of the approach. 'Every region has its individual strengths, which can serve as the basis for its future development ... people in the region themselves can best recognize the strengths of a region and potentials for future development' (BMVEL 2005, p. 4). The approach consequently shifts all responsibilities known in administrative science (i.e. content-wise, financially as well as administratively) to the level of the regional public private partnerships (similar Elbe et al. 2007).

Regional Management: Mediating Local Knowledge

Under Active Regions so-called Regional Management (RM) staff are supposed to organise and guide the development process in the local contexts and provide for networking among local actors (Giessen and Böcher 2008). RM staff played a key role as service provider in the local rural development process of the model regions (BMVEL 2004) and accounts for a considerable share of total Active Regions'



funds. In this capacity they perform a variety of tasks, most of which are related to the management of local internal affairs (BMVEL 2002, 2004). This focus emphasises that RM staff activities necessarily have to be deeply rooted in the local context. Consequently, they need extensive knowledge of local settings, actors and issues and serve as crucial mediators and disseminators of local knowhow.

Financial Responsibility by Local Public Administrative Partners

In contrast to traditional funding programs Active Regions decentralises financial responsibilities to the local level (Interviews Cons1; FedGov3; FedGov4; FedSt2). A local public authority assumes responsibility for financial management, budget administration and formal project approval (BMVEL 2002). This regionalised design for controlling public funds entails considerable simplifications as personal contacts and short distances are perceived as facilitating the development process (Interview FedGov1). Thus, local administrative knowledge also is included in the local institutional structure used by Active Regions, which can be seen as a novel devolution of responsibility to the local level.²

Regional Partnerships as Central Decision-Making Bodies

Regional Partnerships (RPs)—which are subject to rights and duties—form the central steering and decision-making bodies at local levels of implementation (BMVEL 2004). They consist of local actors only, and public authorities may not exceed 50% of the board membership (BMVEL 2001; BMVEL, undated). RPs are supposed to include key regional interest groups, including 'consumers, farmers and forest owners, conservationists, retail, crafts and trades, commerce, health, municipalities, education and science' (BMVEL 2002, p. 7). Throughout the whole process the RP 'must ensure that the respective social groups are included in planning, implementation and assessment of the regional development process and in the use of available funding' (BMVEL 2002, p. 8). Forestry as a sector has been represented in all of the RPs established under the funding scheme. Within RPs, socalled regional development strategies are negotiated and formulated, which build the basis for subsequent local projects. The public funds may then be used 'to implement strategies developed by regional partnerships ... while the regions can select and implement the measures they see as appropriate' (BMVEL 2002, p. 7). 'Measures' in this context are usually projects initiated and conducted by local actors or services and advice provided by external experts. Under Active Regions, individual projects are eligible only if they are in line with the wider development strategy (BMVEL 2004). Other than traditional funding schemes, where external entities including ministries select and approve project grants, Active Regions empowers RPs with the authority to select and to decline such proposals. A further responsibility of RPs lies in the evaluation of the local development process. RPs

 $[\]overline{^2}$ A similar approach to local empowerment has been applied under the LEADER+ program. However, formal project approval in that program remains the responsibility of Federal States' ministries or subordinate organisations.



are required to assess goal attainment and progress made with respect to their development strategy as a continuous mandatory self-evaluation exercise (Elbe et al. 2007). Local knowledge in this regard is being activated by the RPs' responsibilities concerning the *formulation* of a local development program, its *implementation* by selecting projects which then are eligible for public funding, and the *evaluation* of the local process through local expertise.

Self-Evaluations for Internal and External Review

Other notable points of entry for local knowledge have been mandatory selfevaluations. The self-evaluations were based upon own local experiences and followed scientific methods (Böcher 2006) and were carried out and externally interpreted by an accompanying research team (see Böcher and Tränkner 2007). These self-evaluations have then been combined with results of the external scientific knowledge production by the accompanying research (BMVEL 2004). In addition, self-evaluations delivered data for the accompanying research and served as a basis for a mid-term review of the funding program (BMVEL 2004). Thus, the role of local insider knowledge received notable attention. Consequently, activating insider knowledge of local actors through self-assessments facilitated learning processes at the local level, resulting in an increase of endogenous knowledge about the development process, and its strengths and weaknesses (Interview FedGov1). Self-evaluations hence produced new local knowledge. Finally, the extensive use of the elicited materials for external process evaluation by the accompanying research and its communication to policy-makers reflects the transfer of this knowledge to other levels.

Horizontal and Vertical Transfer of Local Knowledge

The role of local knowledge under Active Regions peaks in the mobilisation of local actors' experiences for an actively steered vertical as well as horizontal transfer of their practical knowledge. In summary, at least 19 network meetings, workshops and training courses were organised between 2002 and 2006 (Elbe 2007). Such meetings brought together local actors (i.e. RP-representatives, RM, project officials, Public Administrative Partners) from all 18 participant regions, and by this facilitated the *horizontal transfer* of locally accumulated knowledge. By making local expertise available to other localities the program goes beyond the mere utilisation of local knowledge in an individual local context. The policy approach builds on local knowledge sources, which then are de-localised for extracting the essence in de-localised (i.e. abstracted) contexts.

The *vertical transfer* was carried out by regional and national *focus groups*, which were established to obtain 'knowledge from inside' for the accompanying research and the ministry. During the implementation of Active Regions, 27 meetings of regional focus groups and two meetings of the national focus group were held (Lukesch et al. 2008). Participants of the regional focus groups were members of the regional partnerships, regional management, project initiators and



staff from the local Administrative Partners. At national level, representatives from the federal government, federal states, the Active Regions program, as well as the Leader+ networking units, selected local actors, independent experts on area-based rural development and the accompanying research team have been part of the focus group. A major result of the focus groups' work has been the formulation of an 'imaginary ideal funding program' for future policies of integrated rural development, as described by Lukesch et al. (2008). The imaginary program has been supplemented with the knowledge of the scientists of the accompanying research team in order to formulate central policy recommendations (documented in Elbe et al. 2007). The recommendations genuinely integrate the ideas, experiences and suggestions of the actors involved in local NERD activities (Interview Cons2). In some cases even the wording of local actors' suggestions has been included in the policy recommendations (Interview Cons3).

In summary, institutional as well as process-oriented interventions made under the Active Regions program opened up multiple avenues for meaningful inclusion of local knowledge into development efforts, making the use of such knowledge resources a central component of the overall policy approach. An overview of these features is presented in Fig. 2.

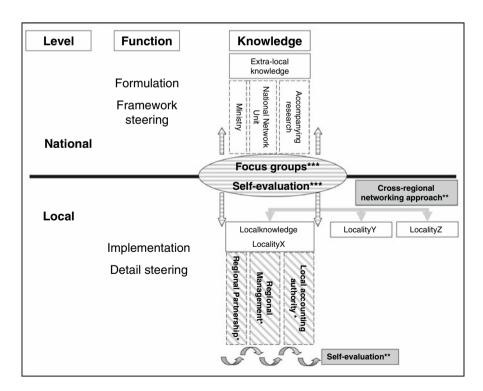


Fig. 2 Avenues for local knowledge within the multi-level policy setting of the Active Regions funding program. *Note*: * Primarily mobilisation, ** primarily production, *** primarily transfer of local knowledge



Policy Acceptance as One Result of Local Knowledge Inclusion

An indication that the involvement of local knowledge increases policy acceptance is provided by secondary empirical material gathered by the accompanying research on the Active Regions program. Representatives of the model 'regions' were asked to weight the five above-mentioned Active Regions principles concerning their importance for the success of the policy approach. Participants rated the principles of 'regionalisation' and 'partnership' the highest (Fig. 3).

These two principles also showed some remarkable interplay, indicating that program characteristics adding to one of both were seen as the main success factors during program implementation. Elbe (2007) conceptualised both principles by analysing the program's instruments contributing to each of them (Table 5). It becomes obvious that Regional Management and Administrative Partners as well as Regional Partnerships including their extensive decision-making competencies, have been addressed under the two principles of the program, which were perceived as being of paramount importance among addressees. Hence, program instruments building on the extensive use of local knowledge are rated so prominent for the success of the approach by policy addressees that the hypothesis of a positive impact of local knowledge use on policy acceptance may be accepted.

Conclusions

Scientific and political discussions about rural governance emphasize the increased role of local knowledge for the establishment and successful steering of rural development processes. Political practice, in the form of funding schemes, ties in with these ideas and even implements them within political funding programs such as Active Regions, as has been empirically shown here. The active incorporation of local knowledge into the funding program also raises policy acceptance among its addressees. In the NERD framework, local knowledge, however, is not used in an eco-romantic way as being the ultimate source of knowledge (as suggested by Neubert and Macamo 2005). Rather, it is used in combination with other knowledge sources including science and expertise provided by national policy-makers and advisers. Hence, local knowledge could not be shown to replace other sources of knowledge. Rather, the combination of sources in the case study was used for optimising local development processes by a mixture of the 'best of both worlds', for providing policy-makers with knowledge which they themselves may not obtain from other sources and for increasing policy acceptance and legitimacy of the intervention.

Regarding types of forest owners, large-scale public forest administrations do not seem to be appropriate addressees of NERD policies. Large private owners as well as municipalities owning forest land and operating at a small scale were found to be

 $^{^4}$ The highest correlation between individual principles occurred among 'regionalisation' and 'partner-ship' (coefficient of correlation = 0.68).



³ Respondents were drawn from regional partnerships, regional management, administrative partners and project officials.

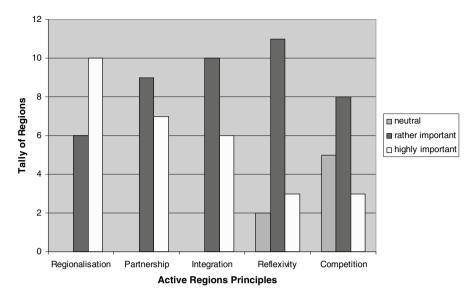


Fig. 3 Relative importance of Active Regions' policy principles as perceived by key actors from 18 model regions. *Source*: Elbe (2007), translated

Table 5	Excerpt from
conceptu	alising the five
Active R	egions' principles

Principle	Instruments for the implementation of the principle
Regionalisation	Regional identity and demarcation of regions Regional development strategy
	Regional project selection
	Regional budget
	Regional administrative partner
Partnership	Partnership approach for policy formulation (Ministry with external experts, Ministry with regions)
	Regional partnerships for implementation at local level
	Regional management

Source: Elbe (2007), translated

promising target groups for NERD programs, because they had either information and resources or an interest in local cooperation for increasing their prestige. These findings, however, should not lead to other small-scale forestry enterprises, namely small and medium private owners and their management associations, being ignored as potential partners. With their extensive resource base and knowledge about local ecological, forest management and social conditions, these types of owners could contribute a great wealth to cross-sectoral area-based policy approaches. Overcoming the information gap within this group of owners has the potential of identifying those owners who, based on their individual interests and values, could contribute to NERD efforts, find new allies and discover innovative solutions to



existing problems of rural areas and small-scale forestry. Still, the sectoral nature of policy formulation and implementation, as was observed in this study, is the main obstacle for forestry participation in NERD programs. Overcoming this sectoral divide would require additional capabilities within forestry to cooperate at an intersectoral level, or a crisis in the sectoral system of public funding, which then touches upon the material interests of the sector, or a rather high innovation potential of the NERD approach for forestry, which cannot be ignored by forest owners and administrations.

References

- Anonymous (2006) Member of the Active Regions council. Interview 8 (December) 2006. Bonn, Germany
- Antweiler C (1998) Local knowledge and local knowing: an anthropological analysis of contested 'Cultural Products' in the context of development. Anthropos 93(4–6):469–494
- Benz A, Meincke A (2007) Analyse der Governance Strukturen. Abschlussbericht der Module 3 und 4 zur Begleitforschung Regionen Aktiv 2004–2006. www.regionenaktiv.de. Accessed 05 Sep 2008
- BMVEL (2001) Regionen Aktiv Land gestaltet Zukunft Informationen zum Wettbewerb. BMVEL, Bonn
- BMVEL (2002) Active regions—shaping rural futures—competition winners. BMVEL, Bonn
- BMVEL (2004) Regionen Aktiv Land gestaltet Zukunft. Zwischenbericht zum Wettbewerb. BMVEL, Bonn
- BMVEL (2005) Actively shaping rural development—guidelines for integrated rural development. BMVEL, Bonn
- BMVEL, German Federal Ministry of Food, Agriculture and Consumer Protection (undated) Notifizierung Regionen Aktiv Land gestaltet Zukunft. www.nova-institut.de/modellregionen/nachricht.php?id=798&typ=3. Accessed 05 2008
- Böcher M (2006) Participatory policy evaluation as an innovative method to improve processes of sustainable rural development. Agric Econ Rev 7(1):49–62
- Böcher M (2008a) Regional governance and rural development in germany the implementation of LEADER+. Sociol Ruralis 48(4):372–388. doi:10.1111/j.1467-9523.2008.00468.x
- Böcher M (2008b) The role of scientific knowledge in theory and political practice—the case of integrated rural development. In: Stehr N (ed) Knowledge and democracy—a 21st century perspective. Transaction Publishers, New Brunswick, pp 183–198
- Böcher M, Giessen L (2006) Forst als Partner in der integrierten ländlichen Entwicklung. In: AFZ-Der Wald 05/2006, pp 263–264
- Böcher M, Tränkner S (2007) Regionen Aktiv Land gestaltet Zukunft Begleitforschung 2004 bis 2006. Endbericht des Moduls 5 – Erfolgsfaktoren und Rahmenbedingungen. www.regionenaktiv.de. Accessed 05 Sep 2008
- Böcher M, Krott M, Tränkner S (2008) Regional Governance und integrierte ländliche Entwicklung. VS Verlag für Sozialwissenschaften, Wiesbaden
- Bruckmaier K (2000) LEADER in Germany and the discourse of autonomous regional development. Sociol Ruralis 40(2):219–227. doi:10.1111/1467-9523.00144
- Cash DW, Clark WC, Alcock F, Dickson N, Eckley N, Jäger J (2002) Salience, credibility, legitimacy and boundaries: linking research, assessment and decision making. KSG faculty research working paper 02-046. Kennedy School of Government, Harvard University, Cambridge, MA
- Edwards B, Goodwin M, Pemberton S, Woods M (2001) Partnerships, power, and scale in rural governance. Environ Plann C Gov Policy 19(2):289–310. doi:10.1068/c12m
- Elbe S (2007) Die Voraussetzungen der erfolgreichen Steuerung integrierter Ansätze durch Förderprogram. Untersucht am Beispiel des Modellvorhabens Regionen Aktiv (Ph.D. Dissertation). Aachen
- Elbe S, Kroës G, Benz A, Lukesch R, Weiß K, Böcher M, Krott M, Meincke A, Middelmann U, Payer H, Rabenau J, Tränkner S (2007) Begleitforschung 'Regionen Aktiv' Synthesebericht und Handlungsempfehlungen. Göttingen



- EU Commission (2005) Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD). EU Commission, Brussels
- EU Commission (2006) Fact sheet: the leader approach. EU Commission, Luxembourg
- Fischer F (2000) Citizens experts and the environment: the politics of local knowledge. Duke Univiversity Press, Durham
- Fischer F (2003) Reframing public policy. Discursive politics and deliberative practices. Oxford University Press, Oxford
- Gibbons M, Limoges C, Nowotny H, Schwartzmann S, Scott P, Trow M (1994) The new production of knowledge: the dynamics of science and research in contemporary societies. Sage, Thousand Oaks
- Giessen L (2008) Forstwirtschaft zurückhaltend bei Programmen zur integrierten ländlichen Entwicklung: Analyse der politischen Ursachen. Forstarchiv 79(3):116–121
- Giessen L (2009) Regional governance in rural development programs—which role for forestry? In: Forests and forestry in the context of rural development. Proceedings of the IUFRO European Congress 2007. Warsaw (in press)
- Giessen L, Böcher M (2008) Integrated rural development policy in Germany and its potentials for new modes of forest governance. Institute of Forest, Environmental, and Natural Resource Policy, Vienna
- Giessen L, Krott M (2009) Forestry joining integrated programs? A question of willingness, ability and opportunities. Allgemeine Forst- und Jagdzeitschrift (accepted, in press)
- Giessen L, Böcher M, Ortner M, Tränkner S (2006) Integrated rural development as pathway for innovations—an unexploited potential for forestry. In: Tikkanen I, Zyrina O, Rametsteiner E, Barreiro O, Michalak R (eds) Policies fostering investments and innovations in support of rural development, 27–29 March 2006, Zvolen, Slovakia. MCPFE, Warsaw
- Goodwin M (1998) The Governance of rural areas: some emerging research issues and agendas. J Rural Stud 14(1):5–12. doi:10.1016/S0743-0167(97)00043-0
- Hahne U (1985) Regionalentwicklung durch Aktivierung intraregionaler Potentiale: zu den Chancen "endogener" Entwicklungsstrategien. Schriften des Instituts für Regionalforschung der Universität Kiel. 8, München
- Hahne U (1986) Changes in the international division of labour and prospects for endogenous development. In: Bassand M et al (eds) Self-reliant development in Europe. Theory, problems, actions. Gower, Aldershot, pp 90–102
- Harrison S, Herbohn J (2000) The role of small-scale forestry throughout the world. In: Harrison S, Herbohn J (eds) Sustainable small-scale forestry: social and economic analysis and policy. Edward Elgar, Cheltenham, pp 3–13
- Jones RA (1996) Research methods in the social and behavioral sciences, vol 2. Sinauer, Sunderland Krott M (2005) Forest policy analysis. Springer, Dordrecht
- Lukesch R, Payer H, Rabenau J (2008) Wissen von innen Regionale Fokusgruppen in der Begleitforschung zu Regionen Aktiv. In: Böcher M, Krott M, Tränkner S (eds) Regional Governance und integrierte ländliche Entwicklung. Wiesbaden (in press)
- Marsden T, Murdoch J (1998) Editorial: the shifting nature of rural governance and community participation. J Rural Stud 14(1):1–4. doi:10.1016/S0743-0167(97)00042-9
- Moseley MJ (ed) (2003) Local partnerships for rural development: the european experience. CABI, Wallingford
- Neubert D, Macamo E (2005) Wer weiß hier was? Lokales Wissen und der Globalitätsanspruch der Wissenschaft. In: Loimeier R, Neubert D, Weißköppel C (eds) Globalisierung im lokalen Kontext-Perspektiven und Konzepte von Handeln in Afrika. LIT, Münster
- Nova-Institut (2008) Active regions project database. Online under www.modellregionen.de. Accessed 04 2008
- OECD (2001) Local partnerships for better governance. OECD, Paris
- OECD (2006) The new rural paradigm: policies and governance. OECD, Paris
- OECD (2007) OECD rural policy reviews: Germany. OECD, Paris
- Ortner (2008) Erfolgsfaktoren für die Beteiligung forstlicher Akteure an der integrierten ländlichen Entwicklung Beispiel: LEADER+ Programm der EU-Strukturpolitik. Dissertation. Göttingen University Press
- Perlis A (2007) Editorial: small-scale forestry. Unasylva 58(3):2
- Pregernig M, Böcher M (2008) The role of expertise in environmental governance: tensions between effectiveness and democratic accountability? In: Paper to be presented at the 2008 Berlin conference on the human dimensions of global environmental change, Berlin



Ray C (2000) The EU LEADER programme: rural development laboratory. Sociol Ruralis 40(2):163–171. doi:10.1111/1467-9523.00138

- Ray C (2006) Neo-endogenous rural development in the EU. In: Cloke P, Marsden T, Mooney P (eds) Handbook of rural studies. Sage, London, pp 279–291
- Rosenau JN (1998) Governance and democracy in a globalizing world. In: Archibugi D, Held D, Köhler M (eds) Re-imagining political community. Studies in cosmopolitan democracy. Cambridge, Oxford
- Schraml U, Selter A (2008) Beyond traditional cooperation: establishing new commons in private forestry. In: Proceedings of the IUFRO 3.08 conference improving the triple bottom line returns from small-scale forestry, held in Ormoc, The Philippines, 17–21 June 2007
- Schröder P (1995) Einführung: Lokales Wissen als konstruktives und kritisches Potential für die Entwicklungszusammenarbeit. In: Honerla S, Schröder P (eds) Lokales Wissen und Entwicklung Zur Relevanz kulturspezifischen Wissens für Entwicklungsprozesse, Saarbrücken, pp 1–18
- Schultze U (1998) Lokales Wissen und Entwicklungszusammenarbeit. Eine Einführung. In: Pasquale S, Schröder P, Schulze U (eds) Lokales Wissen für nachhaltige Entwicklung. Ein Praxisführer, Saarbrücken
- Stehr N (2007) Die Moralisierung der Märkte. Suhrkamp, Frankfurt
- van Averbeke W, Mohamed SS (2006) Smallholder farming styles and development policy in South Africa: the case of Dzindi Irrigation Scheme. Agrekon 45(2):136–157
- van der Ploeg JD (1994) Styles of farming: an introductory note on concepts and methodology. In: Haan HJ, van der Ploeg JD (eds) Endogenous regional development in Europe. Luxembourg, pp 7–31
- van der Ploeg JD, Long A (1994) Born from within: practice and perspectives of endogenous rural development. Van Gorcum, Assen
- van der Ploeg JD, Wiersum KF (1997) Styles of forest management by small forest owners, characteristics and scope for rural development. In: Glück P, Weiss G (eds) Forestry in the context of rural development: future research needs. EFI proceedings 15, pp 45–57
- Woods M, Goodwin M (2003) Applying the rural: governance and policy in rural areas. In: Cloke P (ed) Country visions. Pearson, London, pp 245–262

